

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

CLAIMS

1. In a communication system, a method comprising:
 - 2 transmitting a power control information packet formed from a plurality
 - of power control bits from a base station to one or more mobile stations of a
 - 4 plurality of mobile stations, wherein each of the power control bits in the power
 - control information packet has a position that is mapped to a selected access
 - 6 channel and to a time offset within the selected access channel;
 - controlling a transmission of signals from said one or more mobile
 - 8 stations to a base station on a plurality of M multiple access channels.
2. The method as recited in claim 1 further comprising:
 - 2 receiving the power control information packet at a first mobile station.
3. The method as recited in claim 1 further comprising:
 - 2 transmitting a message from the first mobile station to the base station on
 - a first access channel and at a first time offset associated with the first access
 - 4 channel, wherein said message is transmitted from the first mobile station at a
 - power level determined in response to a first power control bit in the power
 - 6 control information packet, the first power control bit is located in a first
 - position in the power control information packet, and the first position is
 - 8 mapped to the first access channel and the first time offset.
4. In a communication system, a method comprising:
 - 2 transmitting a power control information packet formed from a plurality
 - of power control bits from a base station to one or more mobile stations of a
 - 4 plurality of mobile stations, wherein each of the power control bits in the power

control information packet has a position that is mapped to a selected access
6 channel;

controlling the transmission of signals from a first and second mobile
8 stations of said plurality of mobile stations to a base station on a plurality of M
multiple access channels.

5. The method as recited in claim 4 further comprising:

2 receiving the power control information packet at said first mobile
station and said second mobile station.

6. The method as recited in claim 5 further comprising:

2 simultaneously transmitting messages from the first mobile station and
the second mobile station to the base station on a first access channel, wherein
4 the messages from the first and second mobile stations are transmitted on the
first access channel at power levels that are determined in response to only a
6 first power control bit in the power control information packet, wherein the first
power control bit is located in a first position in the power control information
8 packet, and the first position is mapped to the first access channel.

7. In a communication system, a method comprising:

2 transmitting a power control information packet formed from a plurality
of power control bits from a base station to one or more mobile stations of a
4 plurality of mobile stations, wherein the power control bits in the power control

information packet are transmitted using a modulation that permits each of the
6 power control bits to assume one of first, second and third different states;

controlling a transmission of signals from one or more of said plurality of
8 mobile stations to a base station on one or more of a plurality of multiple access
channels.

8. The method as recited in claim 7 further comprising
2 receiving the power control information packet at a first mobile station;
identifying, at the first mobile station, a state of a first power control bit
4 associated with a first access channel.

9. The method as recited in claim 8 further comprising:
2 performing one of first, second or third operations with said first mobile
station if said state of said first power control bit corresponds to said first state;
4 wherein said first operation corresponds to initiating the transmission of
message information from the first mobile station to the base station on the first
6 access channel, the second operation corresponds to inhibiting the initiation of
transmission of message information from the first mobile station to the base
8 station on the first access channel; and the third operation corresponds to
ceasing the transmission of message information from the first mobile station to
10 the base station on the first access channel.

10. The method as recited in claim 9 further comprising:

2 increasing an output power level of the first mobile station on the first
access channel if the state of the first power control bit corresponds to said
4 second state;

 decreasing the output power level of the first mobile station on the first
6 access channel if the state of the first power control bit corresponds to said third
state.

11. In a communication system, a method comprising:

2 transmitting a first power control information packet including at least
one power control bit from a first base station associated with a first cell to a
4 mobile radio unit, wherein the at least one power control bit from the first base
station is transmitted at a first time interval that corresponds to a first access
6 channel;

 performing an access channel handoff for the mobile radio unit as the
8 mobile radio unit moves from the first cell to a second cell of cells.

12. The method as recited in claim 11 further comprising:

2 transmitting a second power control information packet including at
least one power control bit from a second base station associated with the
4 second cell to the mobile radio unit, wherein the at least one power control bit
from the second base station is associated with the first access channel and with
6 the second base station, wherein each of the power control bits in the first and
second power control information packets have a position that is mapped to a
8 selected access channel and to a base station associated with the selected access
channel.

13. The method as recited in claim 12 further comprising:

2 receiving at the mobile radio unit the first and second power control
information packets, determining a state of the at least one power control bit
4 from the first base station and a state of the at least one power control bit from
the second base station, and determining an output power adjustment level in
6 response to the state of the at least one power control bit from the first base
station and the state of the at least one power control bit from the second base
8 station.

14. The method as recited in claim 13 further comprising:

2 transmitting a message from the mobile radio unit to the first base
station and the second base station on the first access channel during the
4 handoff, wherein said message is transmitted from the mobile radio unit in
accordance with the determined output power adjustment level.

15. In a communication system, an apparatus comprising:

2 a base station transmitter configured for transmitting a power control
information packet formed from a plurality of power control bits from the base
4 station to one or more mobile stations, wherein each of the power control bits in
the power control information packet has a position that is mapped to a
6 selected access channel and to a time offset within the selected access channel;

a receiver at a first mobile station configured for receiving the power
8 control information packet.

16. The apparatus as recited in claim 15 further comprising:

2 a transmitter at the first mobile station, wherein the transmitter at the
first mobile station is configured for transmitting a message from the first
4 mobile station to the base station on a first access channel and at a first time
offset associated with the first access channel, wherein said message is
6 transmitted from the first mobile station at a power level.

17. The apparatus as recited in claim 15 further comprising:

2 a controller at the first mobile station configured for determining said
power level in response to a first power control bit in the power control
4 information packet, the first power control bit being located in a first position in
the power control information packet, and the first position being mapped to
6 the first access channel and the first time offset.

18. In a mobile radio telephone system having a plurality of cells, each of the
2 cells having at least one base station transmitter associated therewith, an
apparatus for performing an access channel handoff for a mobile radio unit as
4 the mobile radio unit moves from a first of said cells to a second of said cells,
comprising:

6 a first base station transmitter configured for transmitting a first power
control information packet including at least one power control bit from a first
8 base station associated with the first cell to the mobile radio unit, wherein the at
least one power control bit from the first base station is transmitted at a first
10 time interval that corresponds to a first access channel;

SCANNED, # 14

a second base station transmitter that transmits a second power control information packet including at least one power control bit from a second base station associated with the second cell to the mobile radio unit, wherein the at least one power control bit from the second base station is associated with the first access channel and with the second base station, wherein each of the power control bits in the first and second power control information packets have a position that is mapped to a selected access channel and to a base station associated with the selected access channel.

19. The apparatus as recited in claim 18 further comprising:

2 a receiver at the mobile radio unit configured for receiving the first and second power control information packets.

20. The apparatus as recited in claim 18 further comprising:

2 a controller at the mobile radio unit configured for determining a state of the at least one power control bit from the first base station, a state of the at least one power control bit from the second base station, the controller also determining an output power adjustment level in response to the state of the at least one power control bit from the first base station and the state of the at least one power control bit from the second base station.

21. The apparatus as recited in claim 18 further comprising:

2 a transmitter in the mobile radio unit configured for transmitting a message from the mobile radio unit to the first base station and the second base

1. The first step is to identify the problem or question that needs to be addressed. This involves understanding the context and the specific requirements of the task.